Bioelectrochemistry and Bioenergetics, 21 (1989) 387
A Section of *J. Electroanal. Chem*, and constituting Vol. 275 (1989)
Elsevier Sequoia S.A., Lausanne – Printed in The Netherlands

Author index

Ames, J.R. 269
Astumian, R.D. 319

Bailey, F. 333
Blank, M. 307
Bockris, J.O'M. 133
Brabec, V. 199
Brunori, M. 55
Butko, P. 213

Campanella, L. 55
Chauvin, F. 319
Cherny, V.V. 373
Cuttitta, J.D. 63

DeBari, V.A. 63
Demura, M. 33
Dixon, N.M. 245
Dong, S. 233

Erman, J.E. 213

Gaigalas, A. 319
Glatz, Z. 83
Goodman, R. 307
Greenbaum, E. 171
Gündel, J. 279

Hama-Inaba, H. 355
Hill, N. 333
Hitchens, G.D. 133
Homma, T. 343
Huck, H. 99

Ihn, G.-S. 223

James, E.W. 245
Jouenne, T. 161
Junter, G.-A. 161

Kamiya, N. 25
Kamo, N. 33
Karpinski, Z.J. 261
Kasai, M. 355
Kashiwagi, N. 95
Kazakova, A.A. 367
Kell, D.B. 245
Kiechle, F. 333
Kim, I.-T. 223
Kisselev, B.A. 367
Kleinwächter, V. 199
Kobatake, Y. 33
Kovacic, P. 269
Kozlov, Yu.N. 367
Kranck, H. 87
Kuznetsov, A.M. 289

Lemoine, D. 161
Liu, D.-S. 319
Lovitt, R.W. 245

Malinski, T. 333
Malpress, F.H. 193
Markin, V.S. 373
Marlow, B.D. 63
Matsuoka, H. 343
Mirsky, V.M. 373
Moor, R.M. 149
Mori, H. 343

Neumann, E. 71
Nishimoto, T. 355

Ohtsubo, M. 355
Ohya, H. 47

Reedijk, J. 199
Rix-Montel, M.A. 87
Ryan, M.D. 269

Salamon, Z. 213
Sammartino, M.P. 55
Santucci, R. 55
Sato, K. 355
Sato, T. 47
Schürholz, T. 71
Sokolov, V.S. 373
Song, S. 233
Stefanoni, P. 55
Studničková, M. 83
Sukharev, S.I. 179
Sun, F.Z. 149
Szucs, A. 133

Takekawa, Y. 343
Tanaka, K. 95
Tanaka, T. 47
Tanisho, S. 25
Tien, H.T. 213
Tranchida, G. 55
Trnková, L. 83
Tsong, T.Y. 319

Ulstrup, J. 289

Vasilescu, D. 87
Vetterl, V. 199
Vitello, L.B. 213
Volkov, A.G. 3

Wakao, N. 25
Weber, J. 71
Wicher, D. 279

Zeček, J. 83
Zhu, Y. 233

Bioelectrochemistry and Bioenergetics, 21 (1989) 388–392
A Section of *J. Electroanal. Chem*, and constituting Vol. 275 (1989)
Elsevier Sequoia S.A., Lausanne – Printed in The Netherlands

Subject index

Adipocytes,
changes in membrane potential of intact ——— measured with fluorescent dyes (Bailey et al.) 333
Aminothiols,
spectrophotometric and dielectric studies of two new ———. Interaction with DNA and dipalmitoylphosphatidylcholine (Kranck et al.) 87
Antimycobacterial agents,
reduction potentials of ———: relationship to activity (Kovacic et al.) 269
ATPase,
electroconformational coupling (ECC): an electric field induced enzyme oscillation for cellular energy and signal transductions (Tsong et al.) 319

Bacterial electrodes,
preparation and comparison of *Proteus vulgaris* and *Proteus mirabilis* ——— for the determination of DL-phenylalanine (Ihn, Kim) 223
Bactericidal effect,
——— of an electrodialysis system on *E. coli* cells (Sato et al.) 47
Bilayer lipid membrane,
——— as enzyme-sensitive electrode: determination of the phospholipase activity (Cherny et al.) 373
Electron transfer from cytochrome *c* to cytochrome *c* peroxidase across the ——— (BLM) (Salamon et al.) 213
Reconstitution of the *Torpedo californica* nicotinic acetylcholine receptor into planar lipid bilayers (Schürholz et al.) 71
Brilliant Cresyl Blue,
electrode processes of hemoglobin at a platinum electrode covered by ——— (Dong et al.) 233

Carbon dioxide,
electrochemical response of *Lactuca stolonifera* leaf to ——— gas and some odour compounds (Matsuoka et al.) 343
Cellulose triacetate,
membrane-entrapped cytochrome *c*: electrochemical and kinetic studies (Campanella et al.) 55
Chloroplasts,
biomolecular electronics: observation of oriented photocurrents by entrapped platinized ——— (Greenbaum) 171
*Cis*platin,
interfacial behaviour of trideoxyribonucleotide d(CpGpG) and its complex with the antitumour drug ——— at the mercury/electrolyte solution interface (Brabec et al.) 199
Clostridium sporogenes,
electromicrobial transformations using the pyruvate synthase system of ——— (Dixon et al.) 245
Conversion experiments,
on the characterization of packed-bed enzyme reactors by ——— (Huck) 99
Copper,
the effect of ———(II) ions on dopaquinone cyclization (Karpinski) 261
Cosmid DNAs,
establishment and application of a standard method of electroporation for introduction of plasmid and ——— to mammalian cells (Hama-Inaba et al.) 355
Cytochrome *c*,
electron transfer from ——— to cytochrome *c* peroxidase across the bilayer lipid membrane (BLM) (Salamon et al.) 213
Membrane-entrapped ———: electrochemical and kinetic studies (Campanella et al.) 55

1,2-Dichloroethane,
electrochemical response of *Lactuca stolonifera* leaf to CO_2 gas and some odour compounds (Matsuoka et al.) 343

Dipalmitoylphosphatidylcholine,
spectrophotometric and dielectric studies of two new aminothiols. Interaction with DNA and ——— (Kranck et al.) 87
DNA,
spectrophotometric and dielectric studies of two new aminothiols. Interaction with ——— and dipalmitoylphosphatidylcholine (Kranck et al.) 87
Dopaquinone,
the effect of Cu(II) ions on ——— cyclization (Karpinski) 261

Electric activation,
electroconformational coupling (ECC): an electric field induced enzyme oscillation for cellular energy and signal transductions (Tsong et al.) 319
Electroconformational coupling,
——— (ECC): an electric field induced enzyme oscillation for cellular energy and signal transductions (Tsong et al.) 319
Electrodialysis,
bactericidal effect of an ——— system on *E. coli* cells (Sato et al.) 47
Electrofusion,
factors controlling the ——— of murine embryonic cells (Sun, Moor) 149
On the role of intermembrane contact in cell ——— (Sukharev) 179
Electromagnetic stimulation,
new and missing proteins in the ——— and thermal stimulation of biosynthesis (Blank, Goodman) 307
Electromicrobial transformations,
——— using the pyruvate synthase system of *Clostridium sporogenes* (Dixon et al.) 245
Electron transfer,
protein dynamics and electronic fluctuation effects in ——— reactions of membrane-bound proteins and metalloprotein complexes (Kuznetsov, Ulstrup) 289
Reduction potentials of antimycobacterial agents: relationship to activity (Kovacic et al.) 269
Electronic fluctuation effects,
protein dynamics and ——— in electron transfer reactions of membrane-bound proteins and metalloprotein complexes (Kuznetsov, Ulstrup) 289
Electroporation,
establishment and application of a standard method of ——— for introduction of plasmid and cosmid DNAs to mammalian cells (Hama-Inaba et al.) 355
Electrorotation,
——— on multi- and oligolamellar liposomes (Wicher, Gündel) 279
Embryonic cells,
factors controlling the electrofusion of murine ——— (Sun, Moor) 149
Energy coupling,
electroconformational coupling (ECC): an electric field induced enzyme oscillation for cellular energy and signal transductions (Tsong et al.) 319
Energy transduction,
coulombic hypothesis of mitochondrial ——— (Malpress) 193
Enterobacter aerogenes,
microbial fuel cell using ——— (Tanisho et al.) 25
Enzyme oscillation,
electroconformational coupling (ECC): an electric field induced ——— for cellular energy and signal transductions (Tsong et al.) 319
Enzyme reactors,
on the characterization of packed-bed ——— by conversion experiments (Huck) 99
Enzyme-sensitive electrode,
BLM as ———: determination of the phospholipase activity (Cherny et al.) 373
Escherichia coli,
bactericidal effect of an electrodialysis system on ——— cells (Sato et al.) 47

Fluorescent dyes,
changes in membrane potential of intact adipocytes measured with ——— (Bailey et al.) 333
Formaldehyde,
electrochemical response of *Lactuca stolonifera* leaf to CO_2 gas and some odour compounds (Matsuoka et al.) 343

Gene transfer,
establishment and application of a standard method of electroporation for introduction of plasmid and cosmid DNAs to mammalian cells (Hama-Inaba et al.) 355
Gentamycin,
electron transfer from cytochrome *c* to cytochrome *c* peroxidase across the bilayer lipid membrane (BLM) (Salamon et al.) 213

Glucose oxidase,
electrochemical reactions of ——— at graphite electrodes (Szucs et al.) 133
Gram-positive organisms,
comparison of the in vitro susceptibilities of ——— to four macrolide antibiotics by the lipoic acid-based potentiometric procedure (Jouenne et al.) 161
Graphite,
electrochemical reactions of glucose oxidase at ——— electrodes (Szucs et al.) 133
Guanosine,
reduction of ——— at a mercury electrode (Studničková et al.) 83

Hemoglobin,
electrode processes of ——— at a platinum electrode covered by Brilliant Cresyl Blue (Dong et al.) 233

Iminium ions,
reduction potentials of antimycobacterial agents: relationship to activity (Kovacic et al.) 269
In vivo voltammetry,
——— with an ultramicroelectrode (Tanaka, Kashiwagi) 95
Intermembrane contact,
on the role of ——— in cell electrofusion (Sukharev) 179

Lactuca stolonifera,
electrochemical response of ——— leaf to CO_2 gas and some odour compounds (Matsuoka et al.) 343
Lipid aqueous dispersion,
spectrophotometric and dielectric studies of two new aminothiols. Interaction with DNA and dipalmitoylphosphatidylcholine (Kranck et al.) 87
Lipoic acid,
comparison of the in vitro susceptibilities of gram-positive organisms to four macrolide antibiotics by the ———-based potentiometric procedure (Jouenne et al.) 161

Macrolide antibiotics,
comparison of the in vitro susceptibilities of gram-positive organisms to four ——— by the lipoic acid-based potentiometric procedure (Jouenne et al.) 161
Mammalian cells,
establishment and application of a standard method of electroporation for introduction of plasmid and cosmid DNAs to ——— (Hama-Inaba et al.) 355
Membrane-bound proteins,
protein dynamics and electronic fluctuation effects in electron transfer reactions of ——— and metalloprotein complexes (Kuznetsov, Ulstrup) 289
Membrane potential,
linear equation for calibration of the mitochondrial ——— (Kamo et al.) 33
Menthone,
electrochemical response of *Lactuca stolonifera* leaf to CO_2 gas and some odour compounds (Matsuoka et al.) 343
Mercury,
interfacial behaviour of trideoxyribonucleotide d(CpGpG) and its complex with the antitumour drug *cis*platin at the ———/electrolyte solution interface (Brabec et al.) 199
Reduction of guanosine at a ——— electrode (Studničková et al.) 83
Metal chelators,
reduction potentials of antimycobacterial agents: relationship to activity (Kovacic et al.) 269
Metalloprotein complexes,
protein dynamics and electronic fluctuation effects in electron transfer reactions of membrane-bound proteins and ——— (Kuznetsov, Ulstrup) 289
Microbial fuel cell,
——— using *Enterobacter aerogenes* (Tanisho et al.) 25
Mitochondria,
linear equation for calibration of the mitochondrial membrane potential (Kamo et al.) 33
Mitochondrial energy transduction,
coulombic hypothesis of ——— (Malpress) 193
Multilamellar liposomes,
electrorotation on ——— and oligolamellar liposomes (Wicher, Gündel) 279
Murine embryonic cells,
factors controlling the electrofusion of ——— (Sun, Moor) 149

Neutrophil,
electrochemical aspects of the ——— response to surface-modified polystyrene microspheres (Cuttitta et al.) 63

Nicotinic acetylcholine receptor,
reconstitution of the *Torpedo californica* ——— into planar lipid bilayers (Schürholz et al.) 71

Oligolamellar liposomes,
electrorotation on multilamellar liposomes and ——— (Wicher, Gündel) 279
Oxidative stress,
reduction potentials of antimycobacterial agents: relationship to activity (Kovacic et al.) 269
Oxygen,
——— evolution in the course of photosynthesis: molecular mechanisms (Review) (Volkov) 3

Packed-bed enzyme reactors,
on the characterization of ——— by conversion experiments (Huck) 99
Phagocytosis,
electrochemical aspects of the neutrophil response to surface-modified polystyrene microspheres (Cuttitta et al.) 63
DL-Phenylalanine,
preparation and comparison of *Proteus vulgaris* and *Proteus mirabilis* bacterial electrodes for the determination of ——— (Ihn, Kim) 223
Pheophytin,
electrochemical reduction of ——— and its participation in the functioning of photosystem II (Kazakova et al.) 367
Phospholipase,
BLM as enzyme-sensitive electrode: determination of the ——— activity (Cherny et al.) 373
Photosynthesis,
oxygen evolution in the course of ———: molecular mechanisms (Review) (Volkov) 3
Photosystem II,
electrochemical reduction of pheophytin and its participation in the functioning of ——— (Kazakova et al.) 367
Oxygen evolution in the course of photosynthesis: molecular mechanisms (Review) (Volkov) 3
Plasmid DNAs,
establishment and application of a standard method of electroporation for introduction of ——— and cosmid DNAs to mammalian cells (Hama-Inaba et al.) 355
Platinized chloroplasts,
biomolecular electronics: observation of oriented photocurrents by entrapped ——— (Greenbaum) 171
Platinum,
electrode processes of hemoglobin at a ——— electrode covered by Brilliant Cresyl Blue (Dong et al.) 233
Polystyrene,
electrochemical aspects of the neutrophil response to surface-modified ——— microspheres (Cuttitta et al.) 63
Protein dynamics,
——— and electronic fluctuation effects in electron transfer reactions of membrane-bound proteins and metalloprotein complexes (Kuznetsov, Ulstrup) 289
Protein synthesis,
new and missing proteins in the electromagnetic and thermal stimulation of biosynthesis (Blank, Goodman) 307
Proteus mirabilis,
preparation and comparison of *Proteus vulgaris* and ——— bacterial electrodes for the determination of DL-phenylalanine (Ihn, Kim) 223
Proteus vulgaris,
preparation and comparison of ——— and *Proteus mirabilis* bacterial electrodes for the determination of DL-phenylalanine (Ihn, Kim) 223
Pyruvate synthase,
electromicrobial transformations using the ——— system of *Clostridium sporogenes* (Dixon et al.) 245

Quinones,
reduction potentials of antimycobacterial agents: relationship to activity (Kovacic et al.) 269

Thermal stimulation,
new and missing proteins in the electromagnetic and ——— of biosynthesis (Blank, Goodman) 307
Thylakoid membrane,
biomolecular electronics: observation of oriented photocurrents by entrapped platinized chloroplasts (Greenbaum) 171
Oxygen evolution in the course of photosynthesis: molecular mechanisms (Review) (Volkov) 3

Torpedo californica,
reconstitution of the ——— nicotinic acetylcholine receptor into planar lipid bilayers (Schürholz et al.) 71
Trideoxyribonucleotide,
interfacial behaviour of ——— d(CpGpG) and its complex with the antitumour drug *cis*platin at the mercury/electrolyte solution interface (Brabec et al.) 199
Ultramicroelectrode,
in vivo voltammetry with an ——— (Tanaka, Kashiwagi) 95
Zeta potential,
electrochemical aspects of the neutrophil response to surface-modified polystyrene microspheres (Cuttitta et al.) 63